CONCORDIA UNIVERSITY

Graduate Studies News

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Mailing Address: *S-205, 1455 de Maisonneuve Blvd. West*
Montréal, Québec, H3G 1M8

Location: the second and third floors
2145 Mackay St.

Telephone: *(514) 848-3800*

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From the Dean's Desk

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From the Dean's Desk

"Ten Steps Forward"

There is an excitement in the air at Graduate Studies, and twelve months after my appointment as Dean, the graduate faculty has attained a momentum and focus that bodes well for the future. It is appropriate, therefore, to highlight some aspects of our progress.

1. We have completed the promised graduate awards database. It contains detailed information about 142 scholarships and fellowships available to Concordia students. The existence of this knowledge base adds a new dimension to the quality of our counselling services.
2. As part of our continued efforts to increase the value and quality of Concordia degrees, we have, in collaboration with the Concordia libraries and Alumni Association, introduced Honorary life Memberships to the Concordia libraries system for all Ph.D. recipients of the University. The first such memberships were awarded at the 1987 June convocation.
3. Last month, Concordia awarded its first degrees in the new Executive M.B.A. program. This event represents a milestone in the creative approach to graduate education by the Faculty of Commerce and Administration.
4. Two new Ph.D. programs are in the making. In addition, a proposal for the creation of an M.Sc. degree in Administration, ie., a research-based analogue of the popular M.B.A. program, has passed through the various university levels, and will shortly be submitted to Québec for its consideration. The joint Ph.D. program in Communications involving Concordia, the Université de Montréal, and the Université du Québec à Montréal is now a reality. We will be able to enroll our first students for September. In addition, the Government is studying our proposal for an M.A. in Child Study, and we are actively working on the creation of an interdisciplinary M.A. Our new graduate Diploma in Journalism admitted its first 20 students for this summer term. One of the most exciting elements of our program development is the recent establishment of a joint Ph.D. venture involving Concordia and the People's Republic of China. As the 8th largest graduate school in Canada, we are proud of this international dimension.
5. On-line graduate registration is becoming a reality this summer. The Faculty of Engineering and Computer Science is the first to pioneer this modern approach to graduate registration. If the experiment succeeds, we expect the system to be expanded to the other Faculties. Eventually, the entire process will presumably be integrated into a university-wide telephone registration system.
6. In consultation with the Concordia Community, we have evolved the concept of an "Annual Distinguished Lecture on Teaching and Research". The first such lecture will be given towards the end of October by an internationally renowned scholar, and will be complemented by a panel discussion involving four prominent professors from the different Montréal universities. Details about the lecture will be announced in September.
7. A group of "Women in Graduate Studies" has created an organization advising the Dean on the academic needs of women graduate stu-

dents. The main concern that has emerged so far is the need for more women on the full-time faculty of the university.

8. In order to deal more effectively with the increasing volume and complexity of the administration and development of graduate programs, the Board of Graduate Studies is considering the establishment of a Rules and Regulations Committee and a Development Committee. The usefulness of these bodies will become apparent in the next few months.
9. In response to a task force report, the Board of Graduate Studies has also approved the reorganization of the programs appraisals system. The interval between appraisals has been extended from five to seven years, and a "progress report" is now required three years after an appraisal in order to maintain close contact between the Board and the programs under its jurisdiction.
10. The *Graduate Studies News* has turned out to be a popular medium for the dissemination of information about the activities of the graduate faculty. Given the reactions of its readers, it is clear that the *News* is succeeding in its objective to communicate the new dynamics in graduate studies at this University.

M. E. Rabb

The Master's Program in Mathematics

Mathematics is to science as carbon is to life; one can't exist without the other. And as carbon is found in all organic compounds, so mathematics is found in all areas of scientific enquiry. Mathematics is a cornerstone upon which other disciplines are built and it has been essential in the development of the human understanding of such other basic disciplines as chemistry, physics and biology.

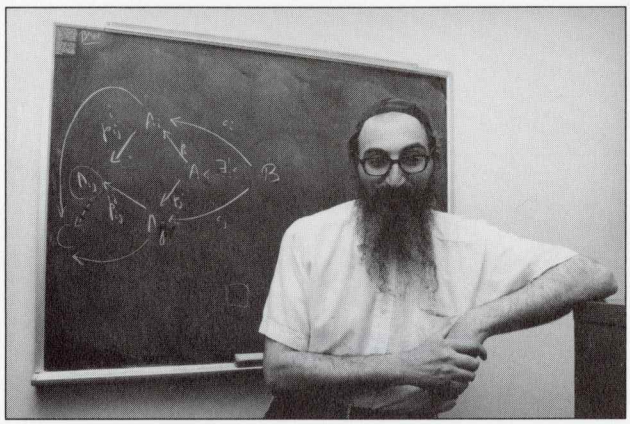
As such, it has acquired an aura of immutability over the course of time. But mathematics does change, says Robert Raphael, the Director of the Graduate Program in Mathematics here at Concordia. "It doesn't change as rapidly as other areas, but the subject, in historical terms, does evolve. As new areas are created, there are others that turn into antiques."

In fact, he says, "many of the classical problems are being solved, most of them in this century." And rapid developments in computer science have already had a great impact on mathematics, Raphael adds, in the sense that there is a trend away from searching for theoretical solutions to problems when computers can provide such quick numerical solutions. "To compute that quickly has made some of the theoretical solutions unnecessary."

At Concordia, where graduate course content is reviewed annually, the Master's Program in Mathematics is an entity that changes in order to remain at the forefront of modern thinking and research.

Dr. Mohammad Malik, the Chair of the Mathematics Department, says number theory and dynamical systems "are two areas in which we have considerable concentration," and that "the department is quite active in research in pure mathematics, applied mathematics and statistics."

The two-year, 45-credit program offers both a thesis and non-thesis option, in which one stresses research and the other stresses course work. Courses are given in the late afternoon and early evening to accommodate working students, although most students attend on a full-time basis and are involved in the thesis option.



E. Cohen of the Mathematics Department

Students completing the program can do so with either a Master of Science or Master of Arts degree, although that is "a legacy of the past," as Malik puts it. It is a matter of which type of degree was awarded at the undergraduate level. A B.A. or B.Sc. with honors in Mathematics is required for admission to the program.

Students work with thesis supervisors on their research papers and at least half of the papers produced by the department are published in refereed journals, Malik says. Occasionally, supervisors will publish joint papers with their students. "Supervisors active in research want to see students publish at least one research paper while working on their theses," Malik insists.

An average of about 10 students receive from $9,000 to $10,000 a year for teaching assistantships. They can also apply for fellowships. As well, Malik explains, the university tries to help ease the financial strain by providing students up to $10,000 in free computer time on the university's system for work on their research projects.

Approximately 30 percent of the those enrolled in the program are international students from such countries as Greece, The People's Republic of China, Pakistan and Egypt. Of the remainder, many are professors from CEGEPs (community colleges) around Montréal.

Most graduates of the program find jobs in private industry and as teachers, although others have started their own businesses or gone on to study law, Raphael says. Many graduates also go on to study Mathematics at the doctoral level.

While a scarcity of jobs for new Mathematics professors frightened students away from graduate programs across the country in recent years, Raphael points out that the job market has started to improve. "Generally speaking, companies find that it's a good subject. It teaches students intellectual discipline and how to think," Raphaels says.

The department also offers a Master's degree in the Teaching of Mathematics and a Diploma in the Teaching of Mathematics (which will both be profiled in upcoming issues of the Graduate Studies News).

For further information about the department's Graduate Program in Mathematics, call (514) **848-3232,** or write to the Department of Mathematics, Concordia University, 7141 Sherbrooke Street West, HB-234, Montreal, Québec. H4B IR6

The Master of Arts (Art Therapy)

Julia Byers, Director of the Master's program in Art Therapy at Concordia, is anxiously awaiting two decisions that could dramatically raise the profile of the program and its graduates.

In one case, the Federal Ministry of Employment and Immigration will soon decide whether graduate level education should be required as a qualification for those wishing to practice Art Therapy in Canada. In another case, the American Art Therapy Association (AATA) will soon make up its mind whether to give its stamp of approval to Concordia's Art Therapy program.

As it stands now, those with Bachelor's degrees, in Social Work and Education for example, are applying for and winning jobs as Art Therapists. If Employment and Immigration rules in Byers' favor, it will greatly improve job prospects for Concordia graduates, because this is the only university in Canada to provide full professional training in Art Therapy, through the combined Diploma and Master's programs offered by the Department of Art Education and Art Therapy.

Approval from the AATA would enhance the program's reputation as well, because, unlike Canada, with only one full professional program in Art Therapy, the United States has 32 such programs. To be accredited by this organization means meeting the same high standards that American schools must meet, which would be an obvious statement about the quality of Concordia's program. It would also advance the cause of Concordia's graduates wishing to practice in the United States.

For all the good possibilities these decisions may carry with them the program can hold its own without them. The author of a recent appraisal was particularly impressed by the program's international aspect (combining approaches to Art Therapy common in Britain, France and the U.S.) and its practicum (students must complete a comprehensive internship at a local health care facility).As well, the MA program has grown in stature since it was introduced in 1983 to the point where it will become a separate program this September. The program attracts applicants from across Canada.

Entry to the 45-credit MA program is contingent upon completion of the university's 30-credit Diploma program in Art Therapy, or its equivalent. Both the master's and diploma programs require 400 hours of study achieved through the practicum.

The practicum can be carried out at any of the 40-odd hospitals and institutions that participate in the program, and involves observing and working with health care professionals as well as direct contact with patients. Byers says students spend an average of two and a half days a week fulfilling their practicum requirement. The internship serves not only to provide graduates with good job opportunities upon completion of the program, but also to provide good ideas for research papers.

J. Byers, Director, M.A. (Art Therapy)

Byers describes Art Therapy as "a gentle modality," in which the therapist attempts to help those with emotional and psychological difficulties come to an understanding of their problems through interpretation of the art they produce. This is meant to be more a cooperative discovery process than one in which the therapist imposes her own interpretation of the client's images. Art Therapists try to help the clients come to their own understanding of what the images mean.

"The program," says a department document, "is constructed around the premise that image-making can express symbolically a person's psychological experience, that it is capable of ordering such experience when it is overwhelming, and articulating such experience for therapeutic purposes. There is an assumption that the development of skills in communication between therapist and client, both

through the images themselves and through verbal exchanges, will assist these processes. The pro-gram emphasizes the practical and theoretical applications of art in therapy.''

While words are common to mankind, images are unique to the individual, and, as such, offer a more complete, less linear portrait of the individual than verbal therapy, Byers argues. She points out, however, that art therapy is often used in conjunction with other forms of therapy, as part of a client's overall treatment.

Art therapists work in a variety of settings, and with a variety of clients. Settings include long-stay medical wards, prisons, psychiatric hospitals, short-term crisis intervention centres, special schools for the emotionally disturbed and half-way houses for ex-psychiatric patients or criminal offenders. Clients include disturbed adolescents, the physically and mentally handicapped, psychogeriatrics, acute and chronic schizophrenics, and autistic children among others.

Because art therapy is concerned with the use of art for therapeutic purposes rather than for instructional and pedagogic approaches to changing clients' outlooks, students are encouraged to ''engage in extensive self-exploration,'' in order to become familiar with the therapy process.

MA students must complete eight 3-credit required courses, nine credits from elective courses (including studio art courses) and a thesis worth 12 credits.

A departmental document states that Art Therapy training at Concordia is considered unique because ''of its location in a cultural environment where French, British and American traditions in both art and psychology interweave''.

Enrolment for the 1985/86 school year stood at 23 full-time and five part-time students. The program expects to admit from eight to 12 new students per year in the coming years, Byers says.

Career prospects are growing in proportion to professional and public appreciation for Art Therapy. Many graduates have gone on to find work at the health institutions where they performed their internships. These jobs include full-time and part-time positions as Art Therapists in Montréal and Toronto. One recent graduate found work at a prison in Vancouver as an Art Therapist.

Several faculty members have training in psychiatry or psychology, an aspect of the program that is intended to provide students with an appropriate background in psychological and emotional disorders.

Faculty specializations include clinical art therapy; child, adult and family psychodynamic psychology; Jungian psychology; art therapy; art and psychopathology; aesthetics and art therapy; clinical psychology; pyschosomatic research; adolescent art therapy; psychoanalysis; pediatrics and psychiatry; child psychiatry; transcultural psychiatry.

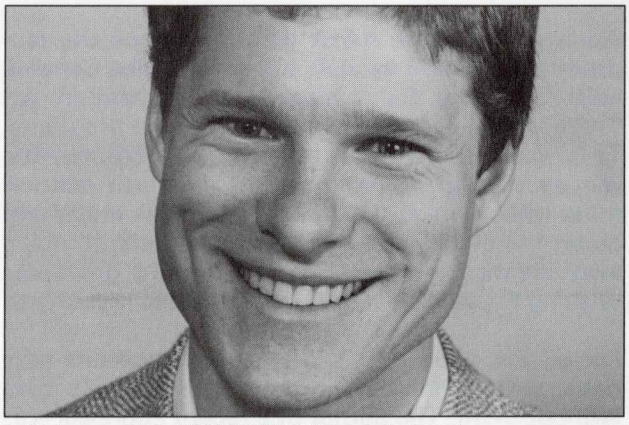
Those interested can call the department of Art Education and Art Therapy at (514) **848-4646,** or write, care of Concordia University, 1455 de Maisonneuve Blvd. West, V-208, Montréal, Québec, H3G 1M8.

Student Profile: James Cochrane

A recent graduate from Exercise Science, James Cochrane won the prestigious NSERC 1967 Undergraduate Award. He followed the pre-research specialization option at Concordia and with the encouragement of Dr. John Sullivan received this honour. From Concordia he will go on to the University of Waterloo and work with Dr. R. Hughson of the Department of Kinesiology. In all likelihood he will follow the combined MA-Ph.D. program there and do work in gas exchange analysis with emphasis on the use of computer simulated models for study.

Mr. Cochrane has a wide array of interests in the sciences and is involved in a number of important social concerns as well, most notably with the Montréal Association for the Blind. He also sees the stock market as a science and regularly devises new strategies for trading on the various exchanges.

Students of this calibre are a credit to Concordia University and indicate that as we mature we can expect to achieve greater excellence. The Graduate Awards Officer, individual faculty members, program directors and chairs can all work in concert to encourage students to enter competitions. The more assistance and support offered to outstanding students, the more likely they will win awards of this magnitude and acclaim. Efforts put forward bring not only monetary compensation, but also, the sense of pride and recognition to the individual and to the university itself.



J. Cochrane, winner, NSERC 1967 Undergraduate Award

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